Conclusion: CAM therapy was prevalent among our ACS patients with most using CAM for symptom relief and learning about it from their family and friends, with an average out of pocket cost of $92 a month. Given the high prevalence of use and cost, it is essential that medical science investigate the efficacy and potential risks of CAM in patients with coronary artery disease.

POSTER SESSION

1215 Quality of Care for Heart Failure

Tuesday, March 19, 2002, 3:00 p.m.-5:00 p.m.
Georgia World Congress Center, Hall G
Presentation Hour: 4:00 p.m.-5:00 p.m.

1215-163 Underprescribing Angiotensin Converting Enzyme Inhibitors in Heart Failure: A Missed Economic Opportunity

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Background: Despite demonstrated benefits and recommendations by national guidelines, angiotensin converting-enzyme inhibitors (ACE-I) are underprescribed in left-ventricular systolic dysfunction (LVSD) and heart failure (HF). The impact of underutilization has not been quantified in the United States. Our objective was to estimate the annual clinical and economic impact of ACE-I underprescribing in patients identified as ideal candidates for, but not receiving, ACE-I, and the cost effectiveness of prescribing ACE-I in these patients.
Methods: The number of potential candidates not receiving ACE-I was determined from the literature. This population was categorized into 3 cohorts corresponding to the populations from large prospective studies: symptomatic chronic systolic HF (SOLVD-Type), post-myocardial infarction (MI) HF (AIRE-Type), and post-MI, asymptomatic LVSD (SAVE-Type). Based on the literature, we estimated the economic burden of underprescribing ACE-I in terms of excess hospitalizations, direct medical costs (inpatient and ACE-I drug costs), deaths, and life-years lost.
Results: We estimate that more than 280,000 ideal candidates for ACE-I fail to receive treatment, of which 187,850 are SOLVD-Type, 60,771 AIRE-Type, and 32,566 SAVE-Type. ACE-I use in these patients could potentially prevent 2,217, 2,486, and 436 premature deaths, respectively, and save 4,878, 5,469 and 960 years of life annually, respectively. Similarly, 12,645, 3,403, and 235 hospital stays could be averted annually, avoiding $126.5 mil, $34 mil, and $2.4 mil in hospital costs, respectively. Upon inclusion of drug cost ($390 per patient per year), ACE-I treatment in these populations was projected to result in net cost savings of $53 mil (SOLVD-Type) and $10 mil (AIRE-Type) and in a net cost of $10 mil (SAVE-Type) annually. Thus, treating patients in the first two groups was projected to save both lives and costs, whereas treating patients in the third group was projected to cost $10,800 per life-year saved.
Conclusion: Treating the estimated 280,000 patients with LVSD or HF who could benefit from ACE-I therapy is an economically attractive investment to improve quality of care.

1215-168 Physician Specialty and Quality of Care for Elderly Patients Hospitalized With Heart Failure

JoAnne M. Foody, Saif S. Rathore, Yongfei Wang, Frederick A. Masoudi, Edward P. Havranek, Diana L. Ordin, Harlan M. Krumholz, Centers for Medicare and Medicaid Services, *Yale University School of Medicine, New Haven, Connecticut, Colorodo Foundation for Medical Care, Denver, Colorado.*

Background.Whether specialist care is associated with better quality of care remains controversial.We sought to determine whether attending physician specialty is associated with indicators of quality of care among elderly patients hospitalized with heart failure (HF). Methods: We studied a national sample of 26,305 Medicare patients age =65 years admitted to a hospital with HF in 1998-99 to determine whether the specialty of the attending physician was associated with quality of care. Patients were categorized by physician specialty (cardiologist, internist or family practitioner) and evaluated for the use of 9 quality of care indicators among patients eligible for treatment with no contraindications. Results: Cardiologists were most likely to assess EF during hospital stay. In patients in whom EF was shown to be low, the rates of prescription of ACE-I did not vary by specialty. Overall rates for counseling were low irrespective of specialty, although cardiologists were more likely to counsel regarding weight monitoring, worsening symptoms, and follow-up, but were less likely to document smoking cessation counseling (see Table). Conclusions: In this national sample of older patient hospitalized with HF, the specialty of the attending physician was associated with little absolute difference in these 9 process indicators. Irrespective of specialty, significant opportunities for improvement exist in the care of older patients with HF.

Quality Indicator	Cardiologist	Internist	Family Practitioner	p
Assessment of EF	52.3	50.6	45.7	<0.01
ACE-I at Discharge	80.8	78.1	78.8	0.37
Dicharge Counseling				
Smoking Cessation	18.5	25.6	24.1	0.11
Medications	66.6	66.2	63.9	0.13
Weight Monitoring	10.6	8.2	8.2	<0.01
Diet	84.1	83.1	82.1	0.23
Activity Level	77.0	75.3	76.9	0.22
Follow-up Appointment	92.3	89.8	90.7	<0.01
Worsening Symptoms	23.5	21.6	20.1	0.03

1215-169 Cardiologists Care for a Distinct Clinical Subset of Older Patients Hospitalized With Heart Failure: Experience From the National Heart Failure Project

JoAnne M. Foody, Saif S. Rathore, Yongfei Wang, Frederick A. Masoudi, Diana L. Ordin, Harlan M. Krumholz, Centers for Medicare and Medicaid Services, *Yale University School of Medicine, New Haven, Connecticut, Colorado Foundation for Medical Care, Denver, Colorado.*

Background: Little is known about the proportion of older heart failure (HF) patients who have a cardiologist as their attending and whether these patients differ from those treated by other physicians.
Methods: We studied 26,159 Medicare patients age >/= 65 years hospitalized with HF in 1998-99 to determine the proportion of patients treated by cardiologists and to identify characteristics associated with having a cardiologist as an attending. Demographic, clinical, geographic, and hospital characteristics were evaluated in a backward stepwise polytomous logistic regression model to identify factors associated with cardiologist care compared with internist (IM) or family practitioner (FP) care.
Results: Cardiologists cared for 25.5% of patients while IM and FP cared for 50.0% and 24.5% of patients. Female patients (OR 0.91, 95%CI 0.83-1.00), older patients (OR 0.92, 95% CI 0.90-0.95 per each year), and black patients (OR 0.84, 95% CI 0.71-0.99), were less likely to have cardiologist care. Patients with COPD (OR 0.70, 95% CI 0.63-0.75), dementia (OR 0.59, 95% CI 0.49-0.71), and diabetes (OR 0.79, 95% CI 0.72-0.87)were less likely to be treated by a cardiologist, while patients with prior HF (OR 1.15, 95% CI 1.04-1.27) or coronary disease (OR 1.25, 95% CI 1.11-1.41) were more likely to receive cardiologist care. Patients treated in rural areas (OR 0.59, 95% CI 0.50-0.70), in the Midwest (OR 0.71, 95% CI 0.60-0.84 vs Northeast), and in hospitals without cardiac care facilities or hospitals with only a cardiac catheterization lab (OR 0.75, 95% CI 0.64-0.88 and OR 0.65, 95% CI 0.56-0.75 respectively vs with CABG facilities) were less likely to be treated by a cardiologist. Patients hospitalized at for-profit hospitals (OR 1.27, 95% CI-1.06-1.51 vs public) were more likely to have a cardiologist as their attending.
Conclusions: Cardiologists were attendings for only one fourth of older patients hospitalized with HF. These patients are younger with less comorbidity than patients cared for by either internists or family practitioners. Case mix should be considered when making quality of care and outcomes comparisons between specialties.

1215-170 Impact of Age, Gender, and Race on Quality of Care of Elderly Patients With Congestive Heart Failure

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Background: Congestive heart failure (CHF) is more common in the elderly, females, and non-whites in the United States. However, the influence of age, gender, and race on the quality of care of CHF patients (pts) has not been extensively studied.
Methods: We evaluated 5871 Medicare beneficiaries admitted to 31 acute care hospitals in Southeast Michigan with CHF (1/1/98-12/31/98). Patients were identified retrospectively using ICD-9 codes for CHF. They were divided into 3 age groups: Group A (65 ≤ 74 years), Group B (75 ≤ 84 years) and Group C (≥ 85 years). Quality indicators (in ideal patients) were evaluated among different age groups, gender, and race.
Results: The quality care indicators and the impact of age, gender, and race are shown. (Table). There were no differences in the length of stay for the different age groups, gender, or race. One-year mortality was higher in whites compared to non-whites(36.9% vs. 32.9%, p=. 005) with a trend towards higher 1-year mortality with increasing age. Gender did not influence 1-year mortality.
Conclusion: Quality of care is adversely affected by increasing age and female gender in hospitalized CHF pts. This data identifies a significant opportunity for improvement in the quality of care in these high-risk subgroups that needs to be addressed.

Quality Indicators	Group A n=1751	Group B n=2369	Group C n=1244	P Value	Male n=2329	Female n=3542	P Value	White n=4410	Non-white n=1461	P Value
Discharge ACE-inhibitor/ARB (%)	80.4	77.6	75.2	0.429	78.1	78.7	0.804	76.0	84.4	0.001
LVEF documented (%)	70.3	69.4	62.1	0.001	70.1	66.5	0.004	68	67.8	0.88
Discharge smoking cessation counseling (%)	33	20	10.5	0.10	30.6	22.3	0.157	30.2	22.8	0.21
Discharge written instructions (%)	98.1	97.2	94.9	0.122	96.5	97.8	0.142	96.8	97.8	0.295
Weights measured, >50% hospital days (%)	67.3	67.9	55.3	0.003	68.6	63	0.020	66.3	64.8	0.566
Discharge warfarin in CHF pts with atrial fibrillation (%)	56.4	44.6	28.4	0.002	47.2	44.4	0.575	46.9	42.4	0.448